REMARKS

Claims 1-21 are all of the pending claims. Claims 14-21 have been withdrawn from consideration as directed to a non-elected invention. Of the examined claims, claims 1 and 9 are independent claims.

Applicants thank the Examiner for acknowledging the claim for foreign priority and receipt of the priority document.

Drawings

The Examiner objects to the drawings because the drawings contain references not mentioned in the description and the specification contains references signs that are not included in the drawings. Applicant have amended the specification and request that the Examiner withdraw the objection to the drawings.

Claim Rejections 35 U.S.C. § 102

Claims 1, 6, and 7 are rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by Wantanabe et al. (US 4,214,191). Applicants respectfully traverse this rejection at least because the claims require a detector that detects the value of a parameter representing "a cutting resistance during cutting".

With respect to claim 1, it appears that the Examiner is misinterpreting and/or misapplying the teachings of Watanabe.

The system in Watanabe determines a tool offset value caused by the wear of the cutting tool, while taking into account the mechanical deformation of the tool due to heat. When the tool offset value reaches a predetermined value, a different cutting tool is used.

The normal progression of the offset value is shown in Fig. 5. When a machine tool is first used to machine workpieces, the tool offset value decreases due to mechanical deformation of the tool (see for example, m_1, m_2, and m_3). Then as the tool is further used, the tool offset value increases due to wear of the tool (see for example m5 and m6) (col. 6, lines 36-65). A predetermined value Δ is set for determining when the tool offset caused by wear is too great.

In short, the system in Watanabe detects a parameter (tool offset value) that does not represent "a cutting resistance value", as is claimed. Watanabe merely appears to teach a system in which the affect of wear on the cutting tool is determined so that workpieces will be machined within a desired tolerance (col. 5, lines 17-27). There is, however, no teaching or suggestion that when the tool offset reaches the predetermined value that there is a change in cutting resistance.

Therefore, Applicants submit that claim 1 is allowable at least because Watanabe does not teach a detector that detects the value of a parameter representing a cutting resistance. In addition, Applicants submit that claims 6 and 7 are allowable at least because of their dependency from claim 1.

Claim Rejections 35 U.S.C. § 103

Claims 2-5 and 9-12 are rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Watanabe in view of Iwasaki (US 5,304,905). Claim 8 is rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Watanabe. Applicants respectfully traverse these rejections.

With respect to dependent claim 8, Applicants submit that the claim is allowable at least because of the deficiencies in Watanabe discussed above.

With respect to independent claim 9 and dependent claim 12, Applicants submit that the claims are allowable at least because of the deficiencies in Watanabe discussed above and because Iwasaki does not cure these deficiencies.

With respect to dependent claims 2-5, 10, and 11, Applicants submit that the claims are allowable at least because Iwasaki does not cure the deficiency in Watanabe discussed above.

Specifically, Iwasaki refers to a system in which the detected current of a motor 1 is compared to a command value, and the detected position and detected speed of control objects 1 and 2 is compared to command values (col. 1, lines 15-34). As in Watanabe, there is no teaching or suggestion that the detected values are in any way related to a "cutting resistance during sheet cutting".

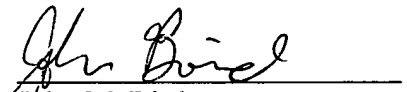
New Claims

Applicants also add new claims 22-26 which are directed to recitations similar to the non-elected claims. Applicants submit that these new claims are allowable at least because of their dependency from claim 1 and because there is no teaching or suggestion in the cited art of a device for estimating the lifetime of a movable blade that is movable over a fixed blade.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

The specification is changed as follows:

Please change the last full paragraph of page 7 as follows:

At an upper side within the housing 16 is disposed a sheet magazine 32, in which the sheet P is wound around a supply reel 20. The sheet P is nipped and unwound by nipping rollers 26 and 27, and thereafter a sheet piece having a predetermined length is cut off therefrom by a sheet cutter 50, details of which will be described hereinbelow. Then, the sheet piece is conveyed by guidance of conveyor rollers 47, 48 and guide plates 49 and wound around the heating drum 42 together with the photosensitive material in an overlapping manner.

Please change the paragraph bridging pages 8 and 9 as follows:

The rotary blade 58 has a rotatable shaft 62 with two ends, both of which ends are rotatably supported by bearings 64 and 66. The bearing 64 is secured to a cantilever-type plate member 68. Between the plate member 68 and a disk plate 61~~A~~ is provided a coil spring 59 which biases the rotary blade 58 toward the fixed blade 54. Thus, a side surface 58A of the rotary blade 58 is pressed to the fixed blade 54 at a cutting point C (see Fig. 3). The fixed blade 54 has an upper surface and an inclined, relief surface, with these surfaces meeting at the cutting point C and forming an angle ~~(θ)~~ with each other (e.g., around 80°). When the rotary blade 58 is moved along the fixed blade 54, the rotary blade 58 rotates due to friction, so that the sheet P is reliably cut at the cutting point C.

Please change the first paragraph of pages 12 as follows:

At step S200, the present current value I of the motor 104 is input, and at step S202, it is determined whether the present current value I exceeds the predetermined reference current value Io. At step S 204, ~~I~~if the former exceeds the latter, the CPU 90, via the display control unit 106, causes the display 108 to display an indication, e.g., a message indicating that the rotary blade 58 should be replaced.

IN THE CLAIMS:

Claims 22-26 are added as new claims.